

Title (en)

Decision feedback equalizer with a pattern detector.

Title (de)

Entscheidungsrückgekoppelter Entzerrer mit Musterdetektor.

Title (fr)

Egalisateur à décision récursive utilisant un détecteur de motif.

Publication

EP 0216183 A2 19870401 (EN)

Application

EP 86111878 A 19860827

Priority

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- JP 19072685 A 19850828
- JP 19072785 A 19850828
- JP 19432985 A 19850902

Abstract (en)

The decision feedback equalizer (DFE) comprises first adaptive filter means responsive to a demodulated data sequence and a residual (S) signal for estimating ISI which occurs during pulse transmission of a period of T second and producing an estimated ISI signal, first subtractor means for subtracting the estimated ISI signal from a received signal having an ISI signal to produce a residual signal, means for extracting the residual ISI signal from the residual signal and a delayed residual signal which is produced by delaying the residual signal, first demodulating means for producing the demodulated data sequence from the residual signal and applying the demodulated data sequence to the first adaptive filter means, pattern detector means for detecting a particular consecutive pattern out of the demodulated data sequence, and means for applying the residual ISI signal to the filter means in response to an output of the pattern detector means. <??>This DFE is simple in construction and small in scale.

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